

Claims

[c1] WHAT IS CLAIMED IS:

1. An actuating device for securing a camshaft of an engine of a motor vehicle in a start position, wherein the actuating device is configured to move the camshaft into a start position by positive control, the actuating device comprising:

a solenoid valve configured to control flow of a pressure medium;

a camshaft adjuster having a rotary slide valve, wherein the rotary slide valve is configured to be fixedly connected to the camshaft and has at least one piston to be acted on by the pressure medium at both piston ends.

[c2] 2. The actuating device according to claim 1, wherein an auxiliary pressure medium volume is supplied to the pressure medium acting on the at least one piston for adjusting the at least one piston.

[c3] 3. The actuating device according to claim 2, further comprising at least one auxiliary storage, wherein the auxiliary pressure medium volume is stored in the at least one auxiliary storage.

- [c4] 4. The actuating device according to claim 3, wherein the at least one auxiliary storage is open to the atmosphere.
- [c5] 5. The actuating device according to claim 3, comprising a pressure medium tank, wherein the at least one auxiliary storage has at least one overflow line connected to the pressure medium tank.
- [c6] 6. The actuating device according to claim 3, wherein the at least one auxiliary storage is a pressure storage.
- [c7] 7. The actuating device according to claim 3, further comprising at least one pump arranged downstream of the at least one auxiliary storage.
- [c8] 8. The actuating device according to claim 7, wherein the pump is an electromagnetic pump.
- [c9] 9. The actuating device according to claim 7, wherein the pump comprises a piston configured to supply the auxiliary pressure medium volume to the pressure medium acting on the at least one piston.
- [c10] 10. The actuating device according to claim 9, further comprising a supply line configured to supply the auxiliary pressure medium volume to the pressure medium, wherein the piston of the pump has an initial position and in the initial position closes of the supply line.

[c11] 11. The actuating device according to claim 3, wherein the camshaft adjuster is configured to return the pressure medium into the auxiliary storage after the engine has been started and the solenoid valve has been switched.